



# Sexually Transmitted Infections in New York City, 2018: Chlamydia, Gonorrhea, and Syphilis

---

Bureau of Sexually Transmitted Infections  
NYC Department of Health & Mental Hygiene

# Overview of STI reporting requirements

The Health Department receives reports from providers and laboratories for a number of infectious diseases, including sexually transmitted infections (STIs), as required by law in the [NYC Health Code](#). Basic demographic information on the person being tested is reported to the Health Department, including name, address, and date of birth. The following STIs are reportable to the Health Department within 24 hours of diagnosis:

<b>Chlamydia</b>	<b>Herpes, neonatal (infants aged <math>\leq</math> 60 days)</b>
<b>Chancroid</b>	<b>Lymphogranuloma venereum</b>
<b>Gonorrhea</b>	<b>Syphilis (all stages, including congenital)</b>
<b>Granuloma inguinale (donovanosis)</b>	

# Overall STI trends

---

# Sexually Transmitted Infections in New York City

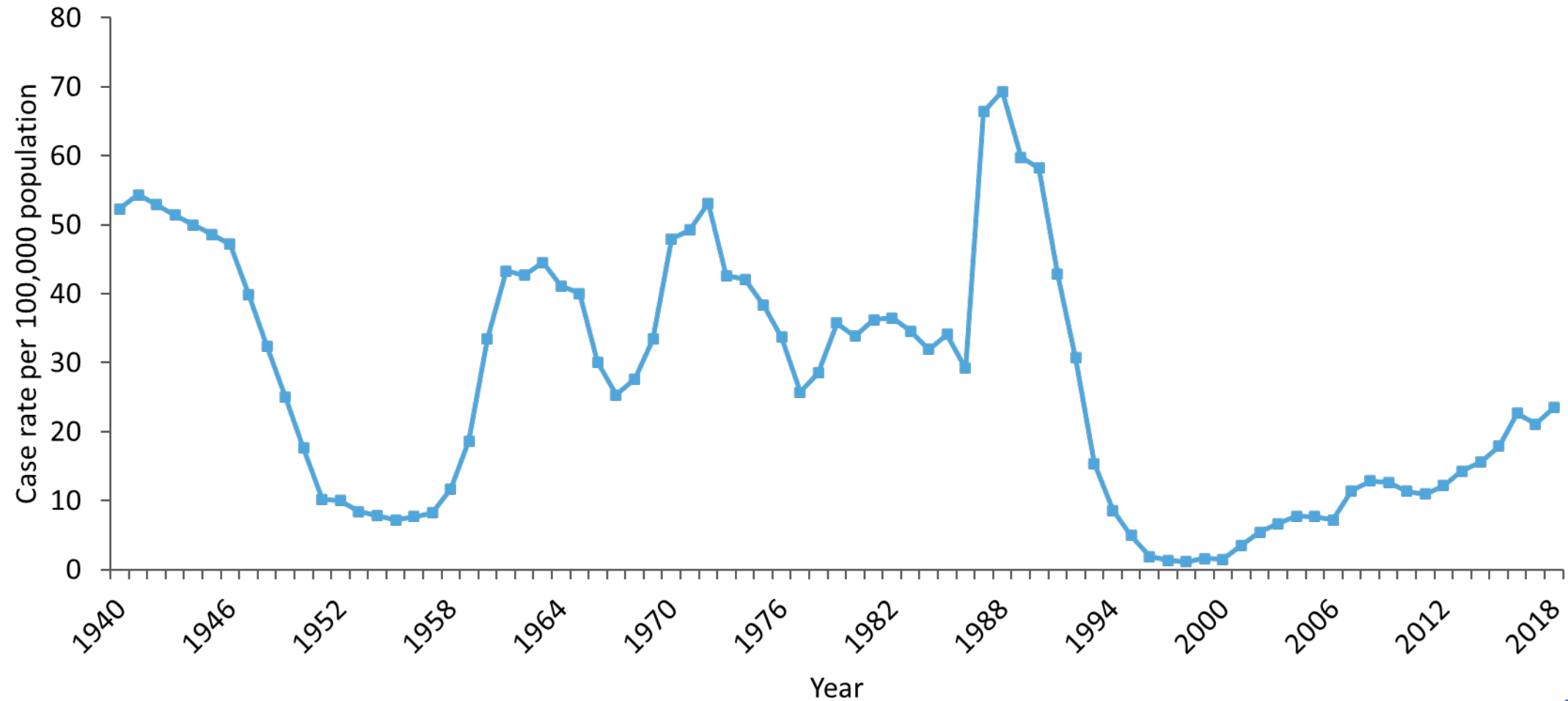
Cases of STI reported to NYC Department of Health, 2017 compared to 2018				U.S. Comparison
STI	2017	2018	% Change (2017 to 2018)	% Change (2017 to 2018)
Chlamydia	71,690	72,445	↑ 1%	↑ 3%
Gonorrhea	23,491	26,128	↑ 11%	↑ 5%
Primary and Secondary Syphilis	1,799	2,026	↑ 13%	↑ 14%
Latent Syphilis	6,194	6,353	↑ 3%	↑ 12%

# Syphilis

---

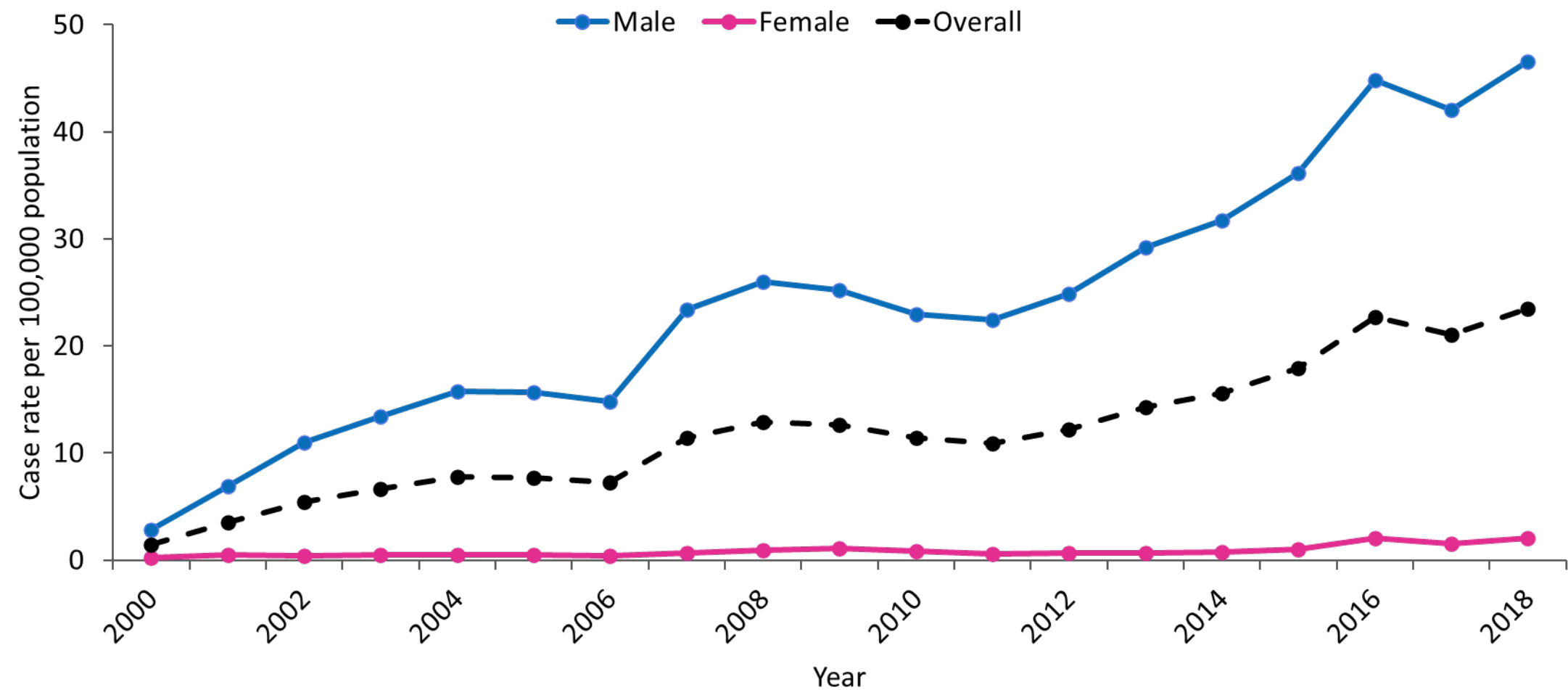


# Reported primary and secondary syphilis case rates (per 100,000 population), New York City, 1940-2018



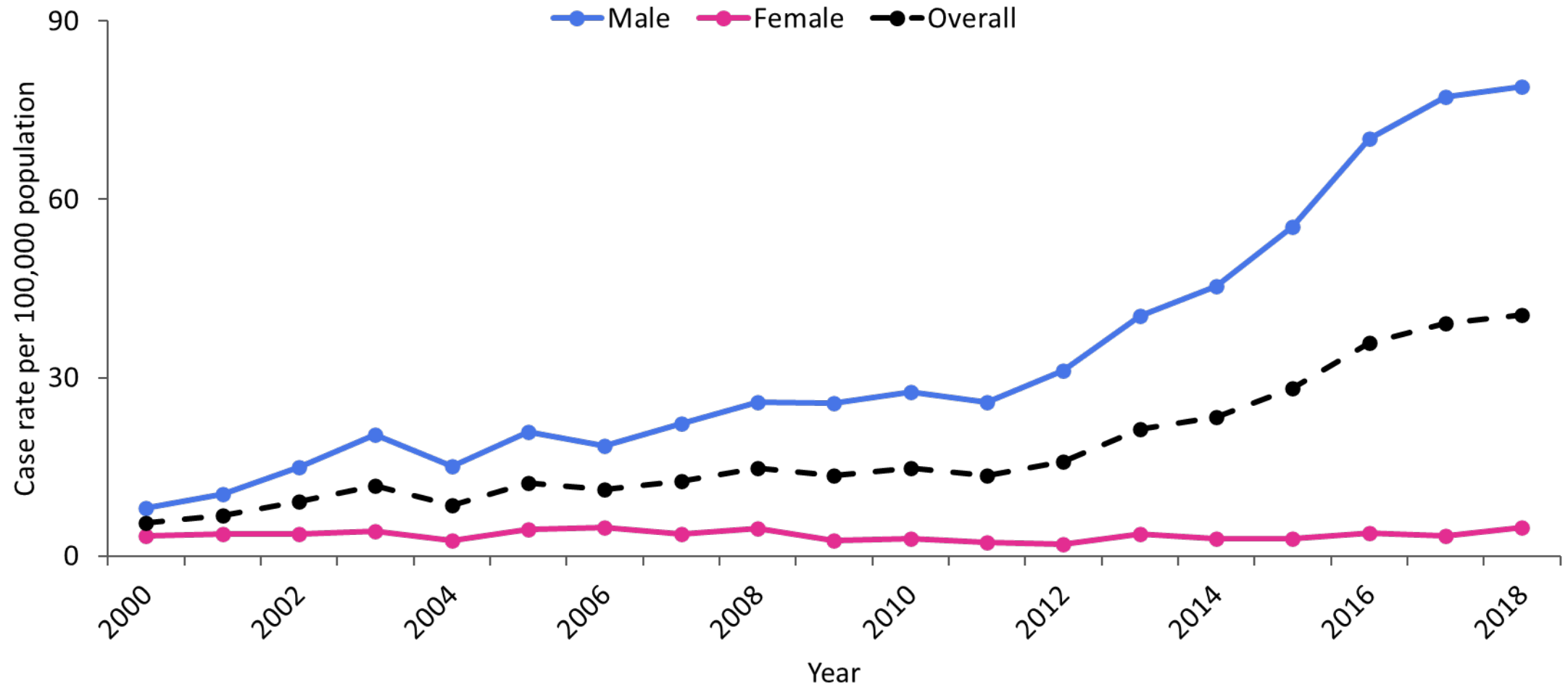


# Reported primary and secondary syphilis case rates (per 100,000), by reported sex, New York City, 2000-2018





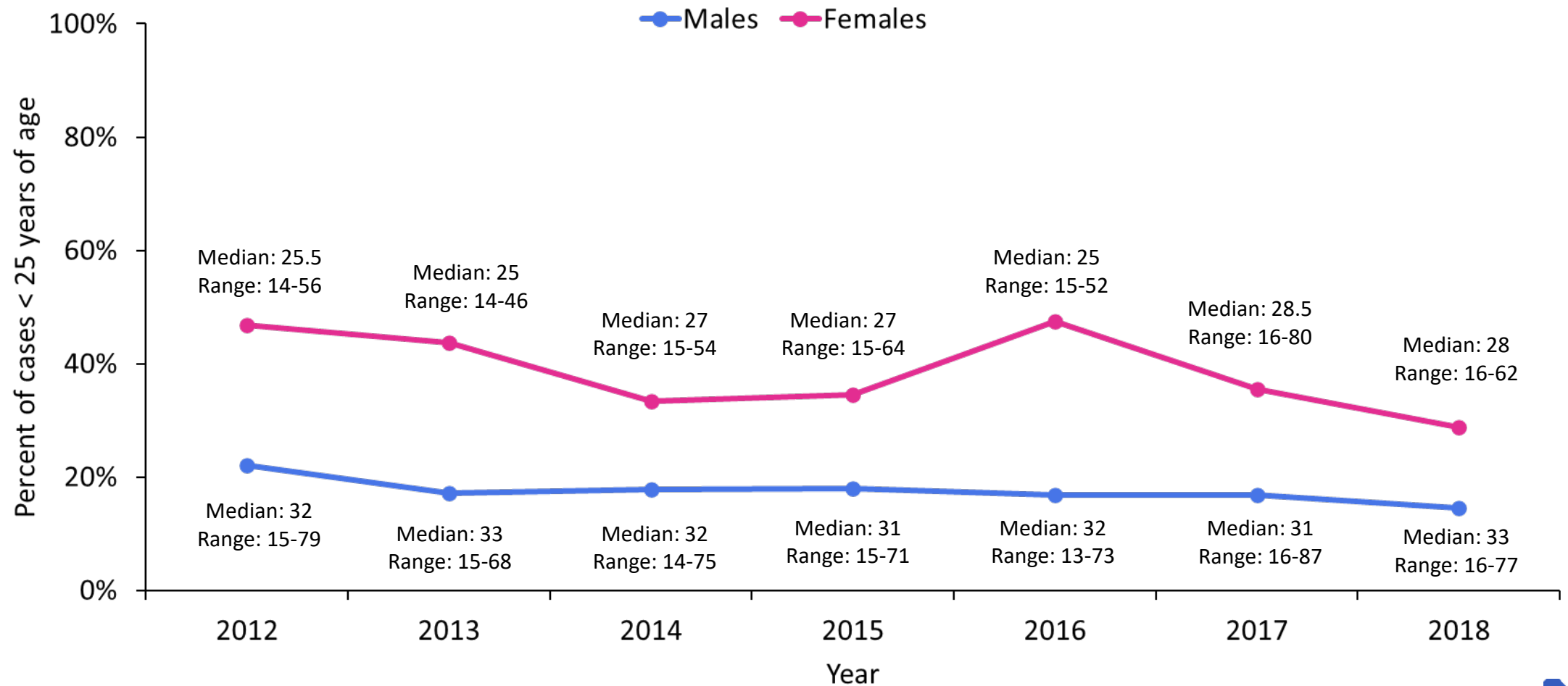
# Reported early latent syphilis case rates (per 100,000), by reported sex, New York City, 2000-2018





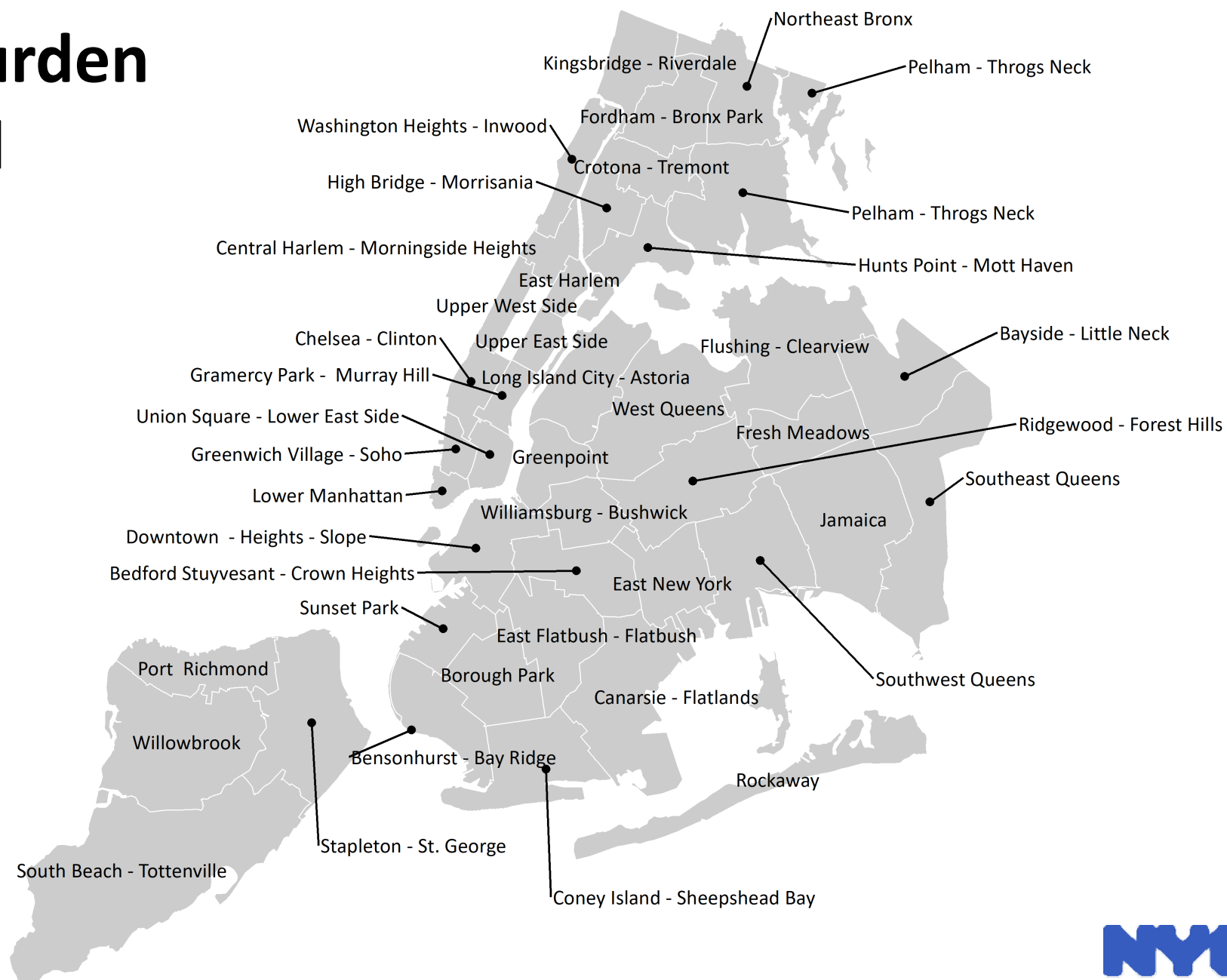


# Proportion of reported primary and secondary syphilis cases <25 years of age, by reported sex, New York City, 2012-2018, w/ age (median, range)



# Measuring STI burden by neighborhood

STI cases are assigned to a **United Hospital Fund (UHF) neighborhood** based on ZIP code of patient residence at the time of diagnosis. There are 42 UHF neighborhoods in New York City, defined by contiguous groups of ZIP codes.





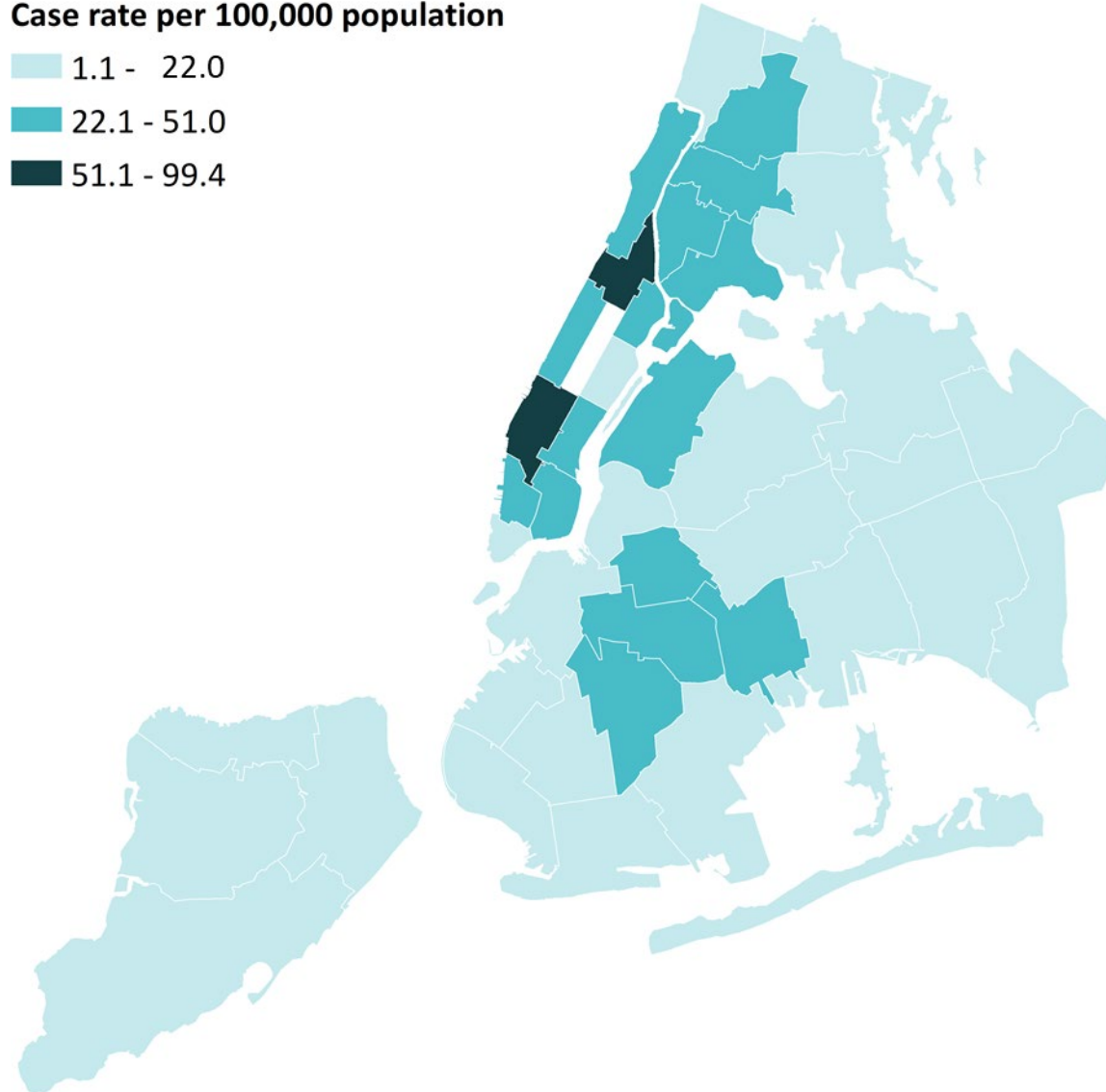
# Reported primary and secondary syphilis case rates (per 100,000), by United Hospital Fund neighborhood, New York City, 2018

Case rate per 100,000 population

1.1 - 22.0

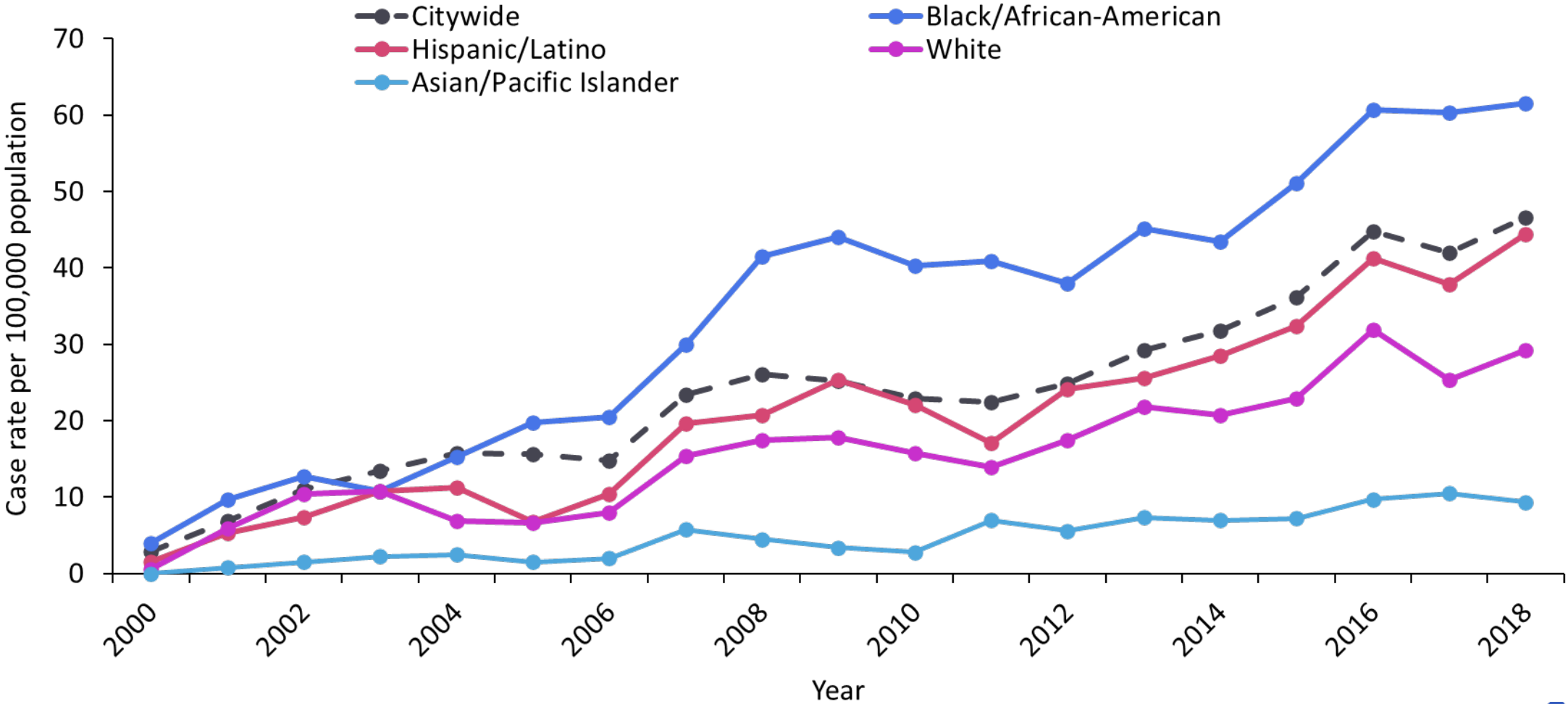
22.1 - 51.0

51.1 - 99.4



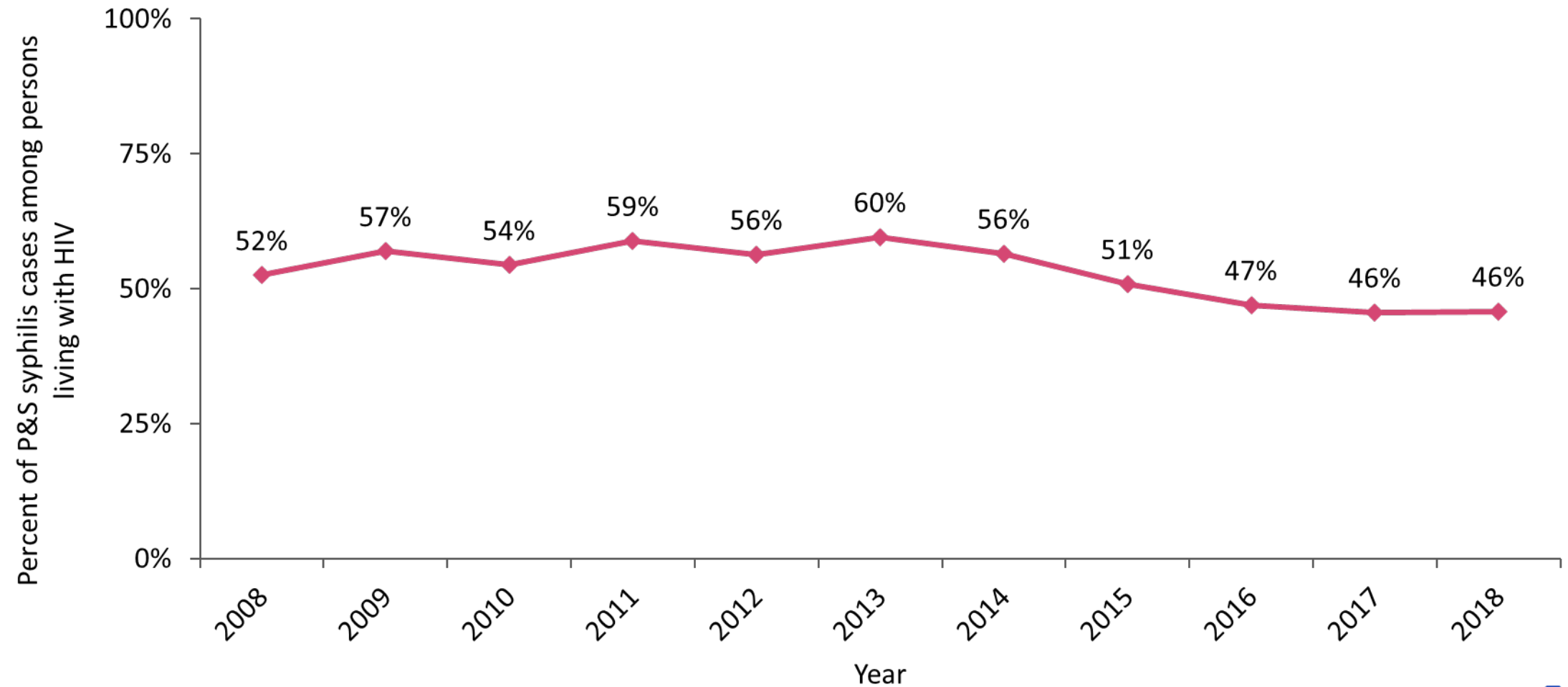


# Reported male primary and secondary syphilis case rates (per 100,000), by race/ethnicity, New York City, 2000-2018



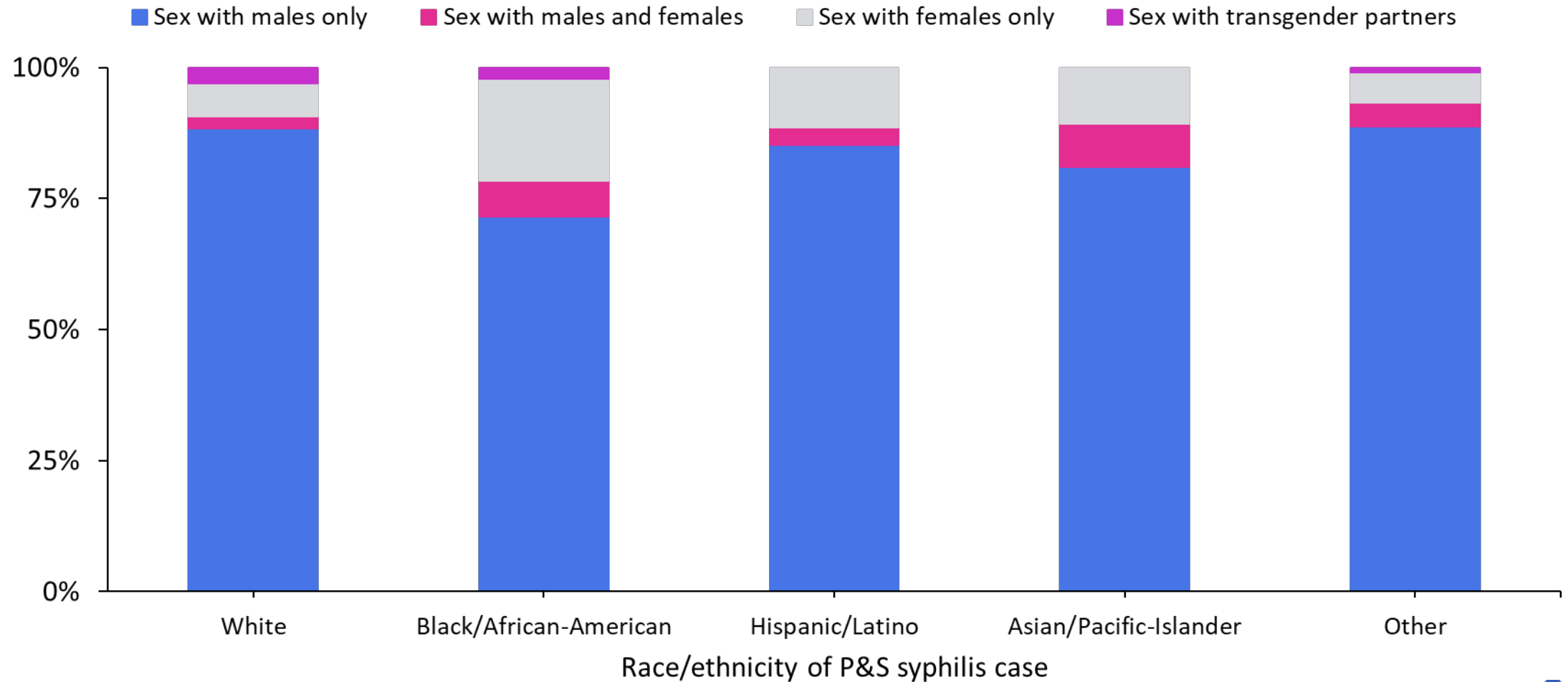


# Proportion of reported male primary and secondary syphilis (P&S) cases with HIV coinfection, New York City, 2008-2018



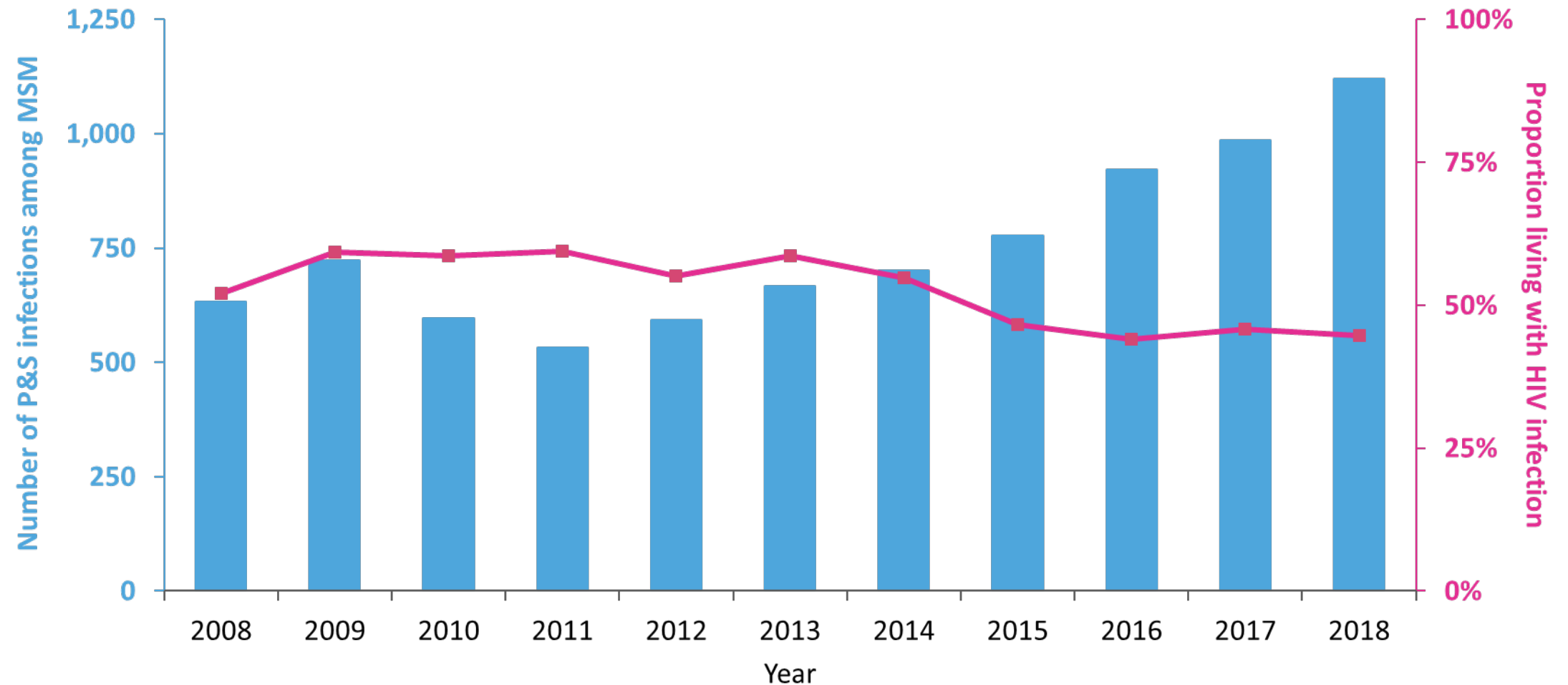


# Sex of sex partners reported by male primary and secondary (P&S) syphilis cases, by race/ethnicity, New York City, 2018



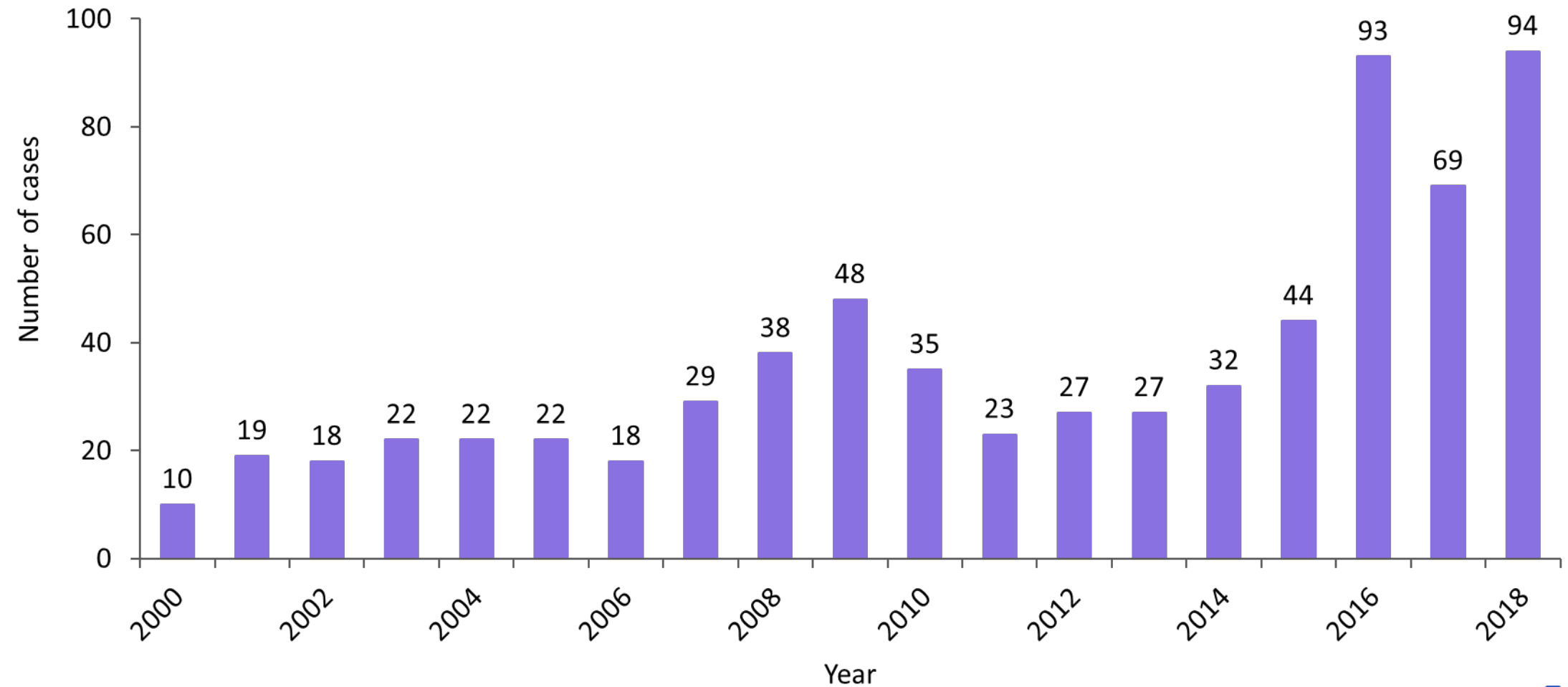


# Number of reported primary and secondary syphilis (P&S) cases among men who have sex with men (MSM), and proportion with HIV co-infection, New York City, 2008-2018





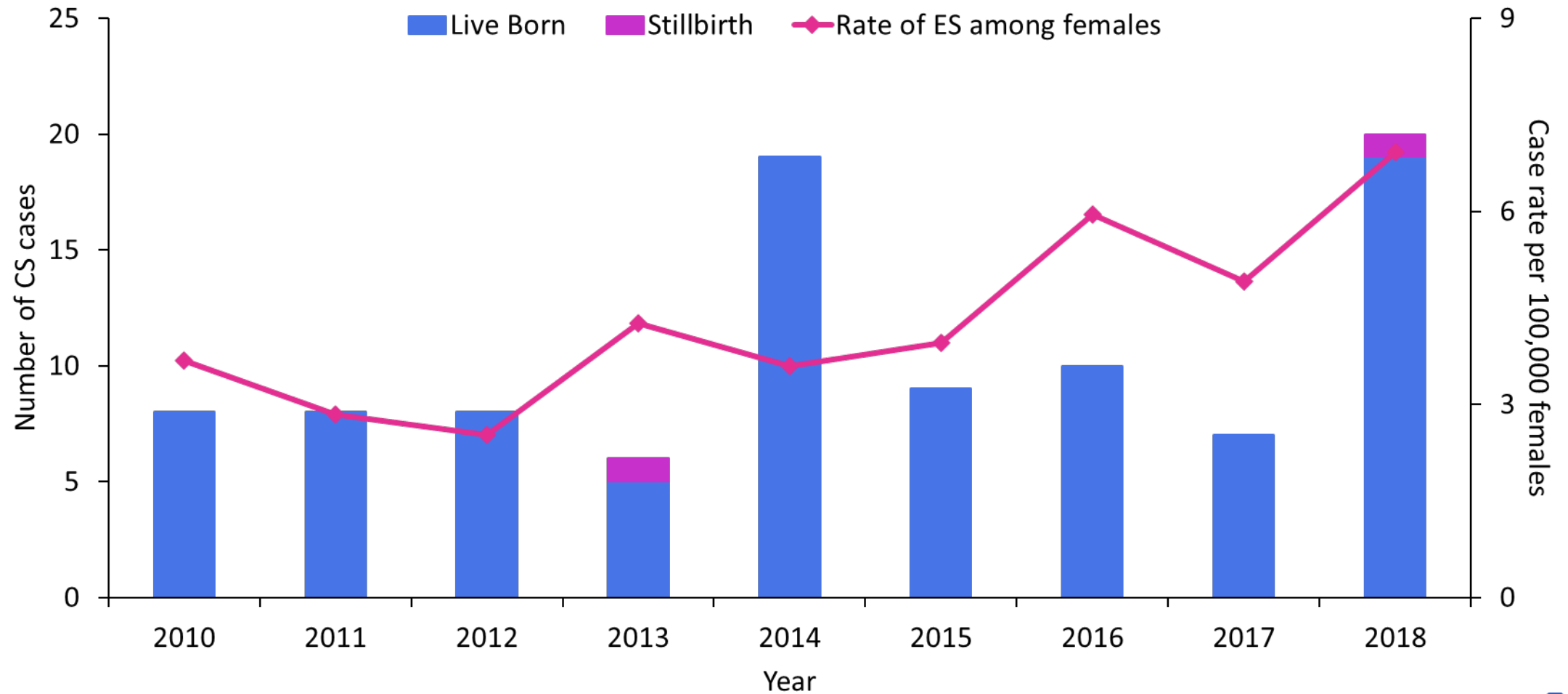
# Reported female primary and secondary syphilis cases, New York City, 2000-2018







# Reported congenital syphilis (CS) cases, by vital status, and early syphilis (ES) rate (per 100,000 females), New York City, 2010-2018

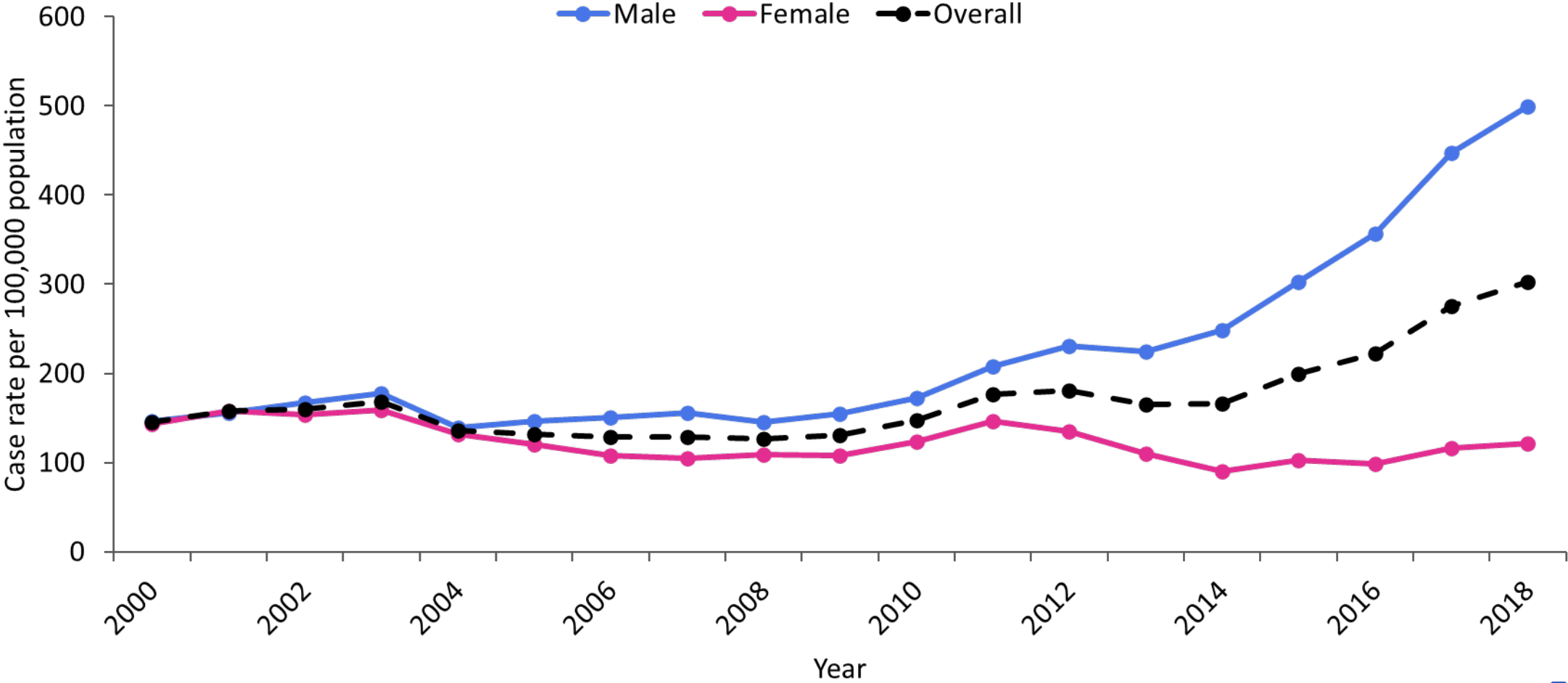


# Gonorrhea

---

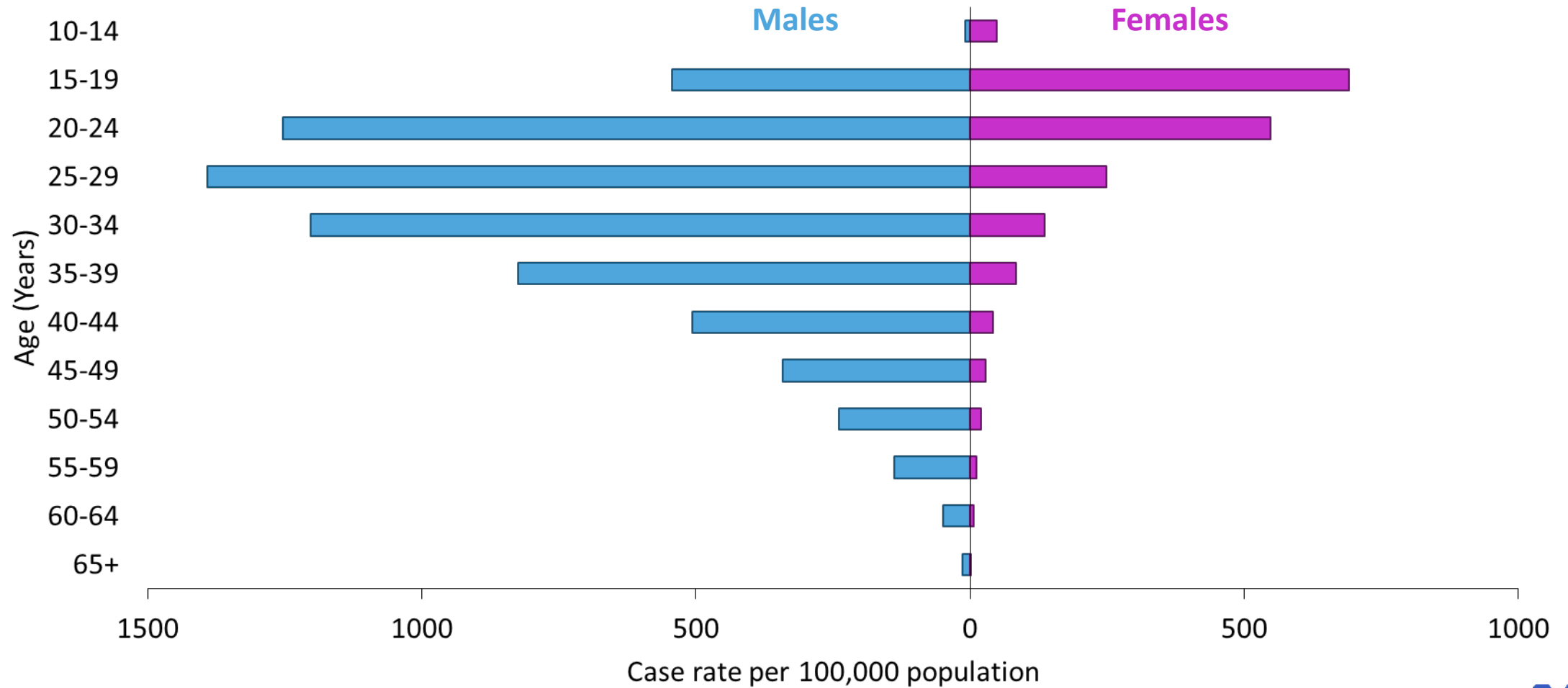


# Reported gonorrhea case rates (per 100,000), by reported sex, New York City, 2000-2018



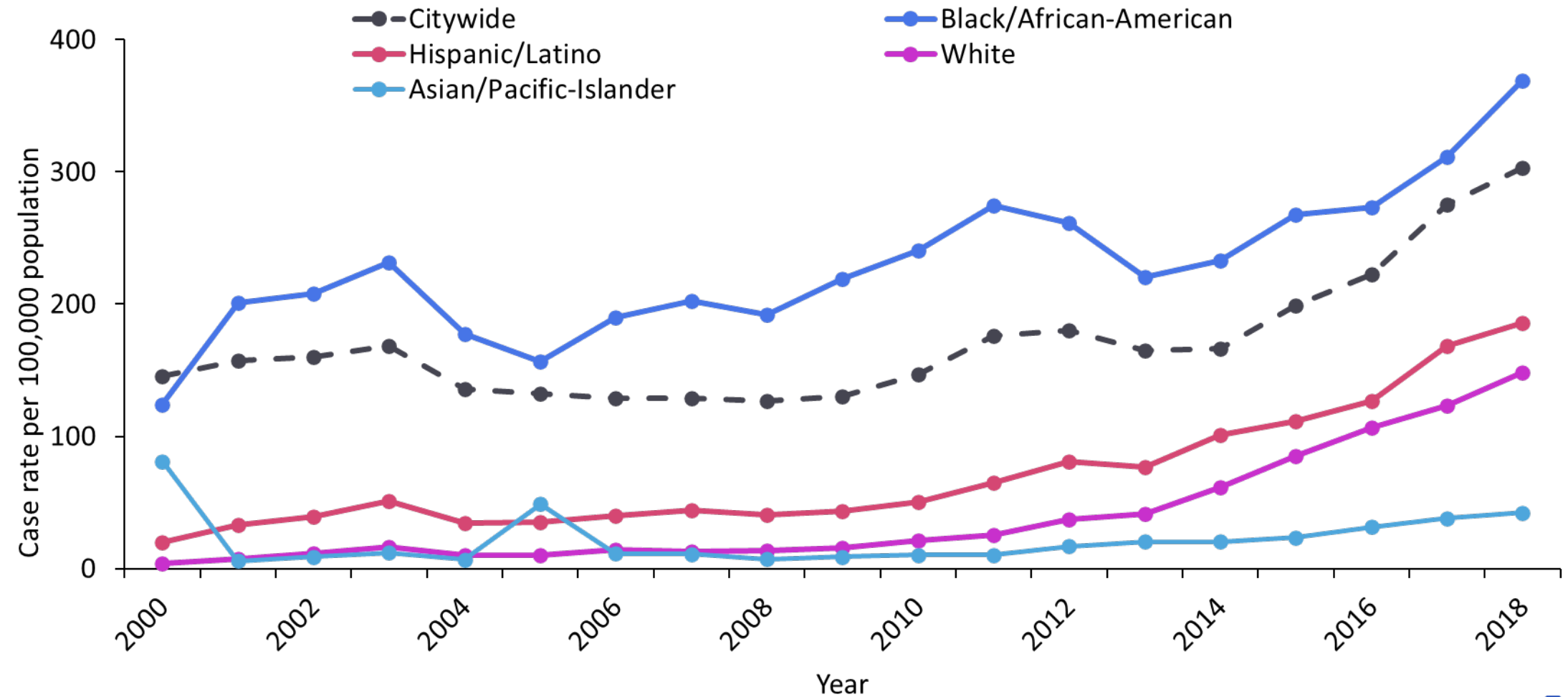


# Reported gonorrhea case rates (per 100,000), by reported sex and age, New York City, 2018





# Reported gonorrhea case rates (per 100,000), by race/ethnicity, New York City, 2000-2018





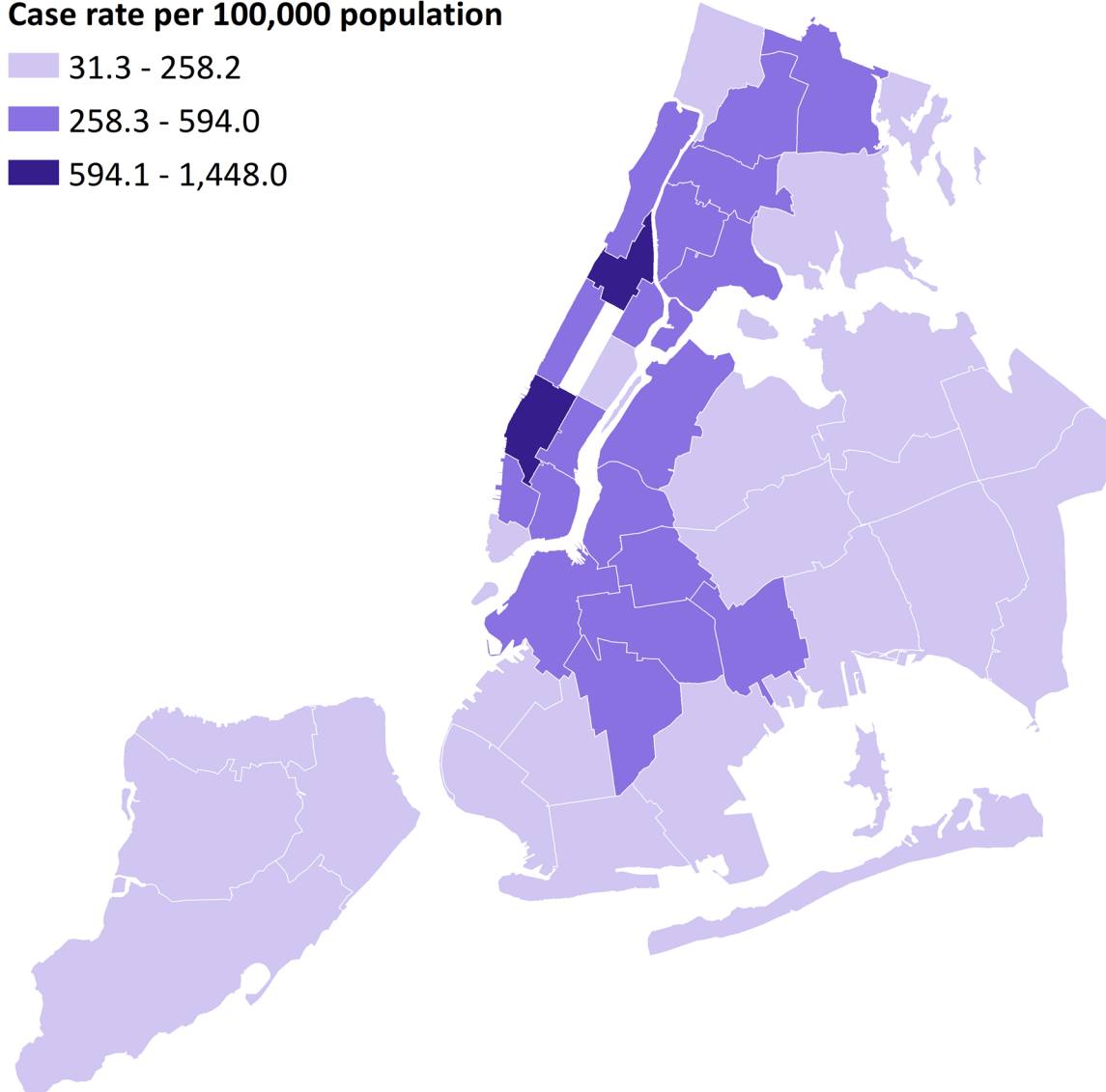
# Reported gonorrhea case rates (per 100,000), by United Hospital Fund neighborhood, New York City, 2018

Case rate per 100,000 population

31.3 - 258.2

258.3 - 594.0

594.1 - 1,448.0

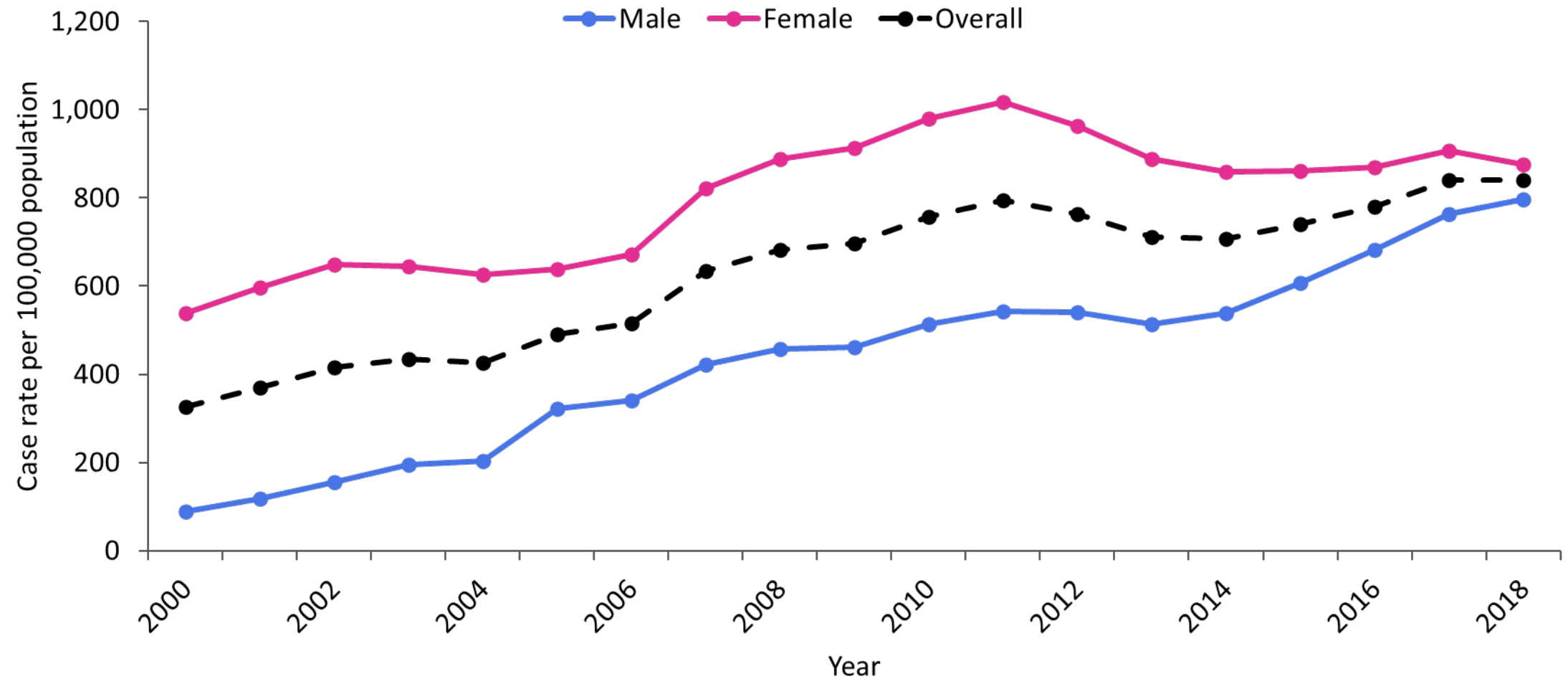


# Chlamydia

---



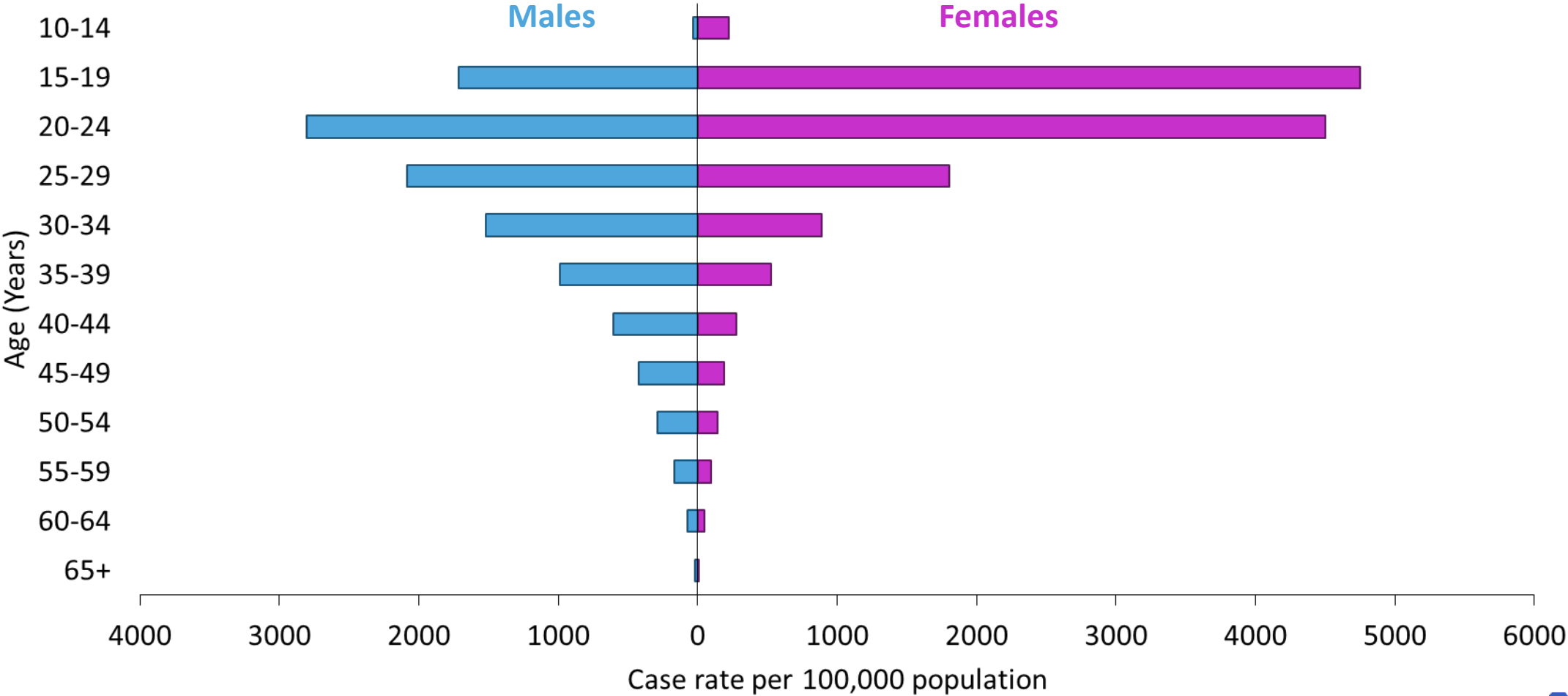
# Reported chlamydia case rates (per 100,000), by reported sex, New York City, 2000-2018





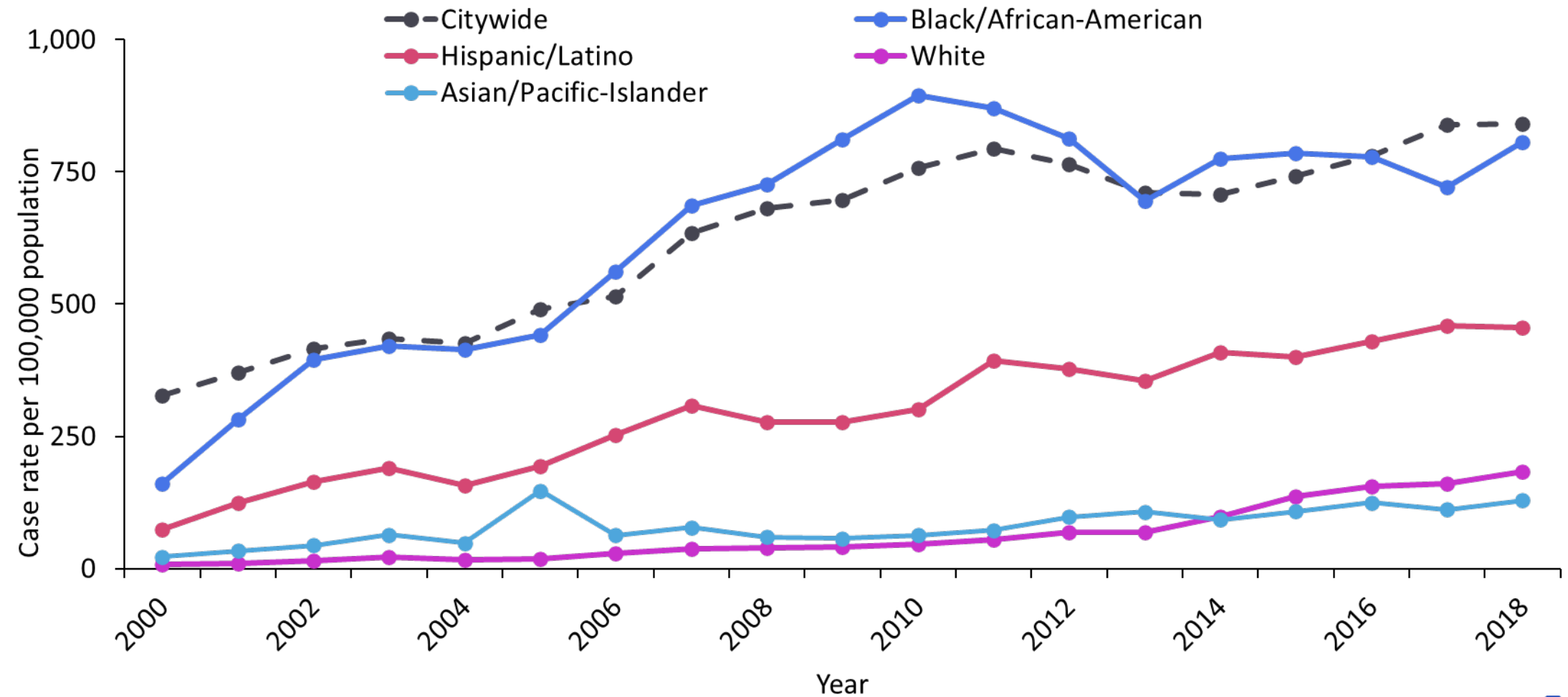


# Reported chlamydia case rates (per 100,000), by reported sex and age, New York City, 2018





# Reported chlamydia case rates (per 100,000), by race/ethnicity, New York City, 2000-2018





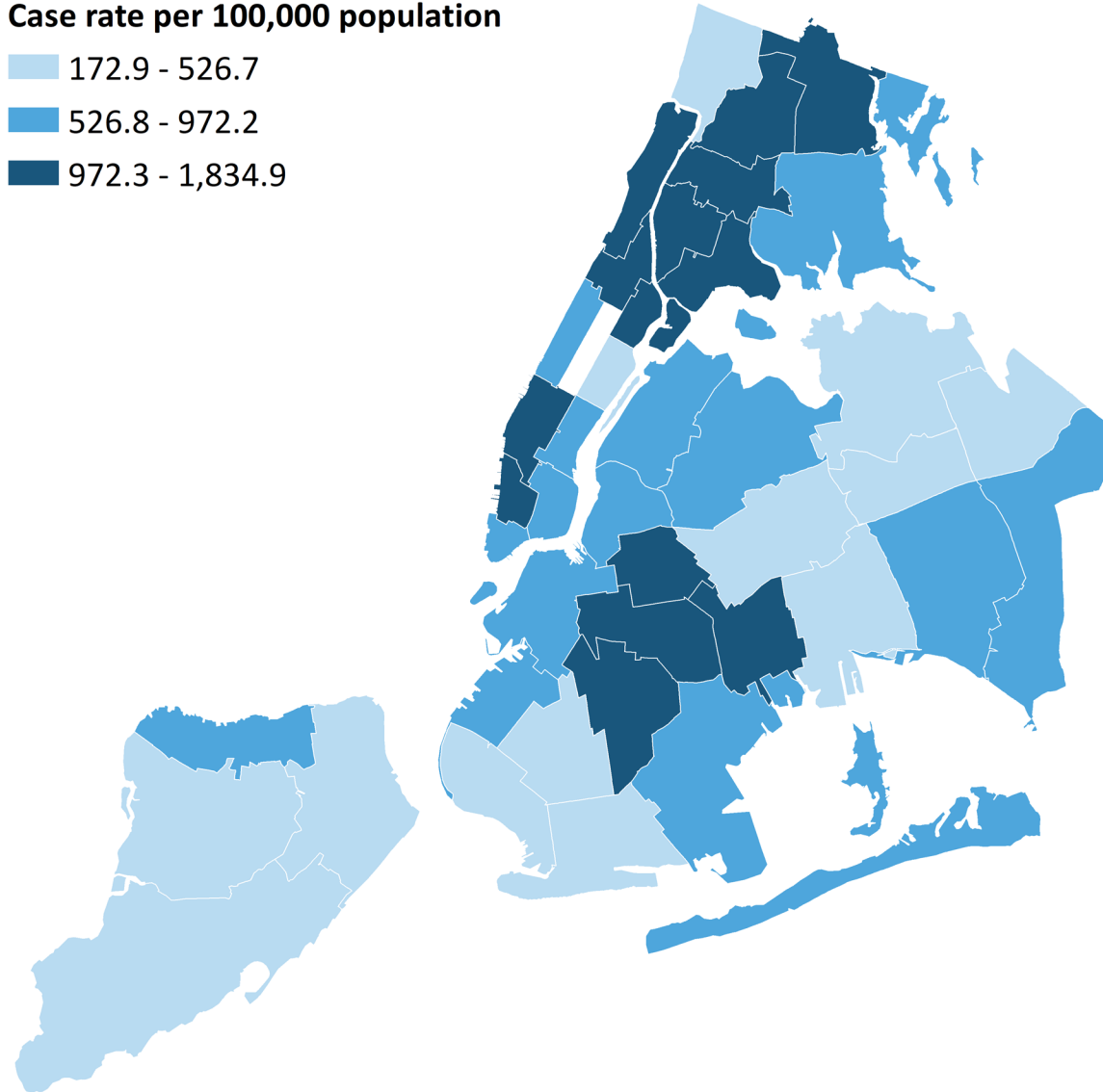
# Reported chlamydia case rates (per 100,000), by United Hospital Fund neighborhood, New York City, 2018

Case rate per 100,000 population

172.9 - 526.7

526.8 - 972.2

972.3 - 1,834.9

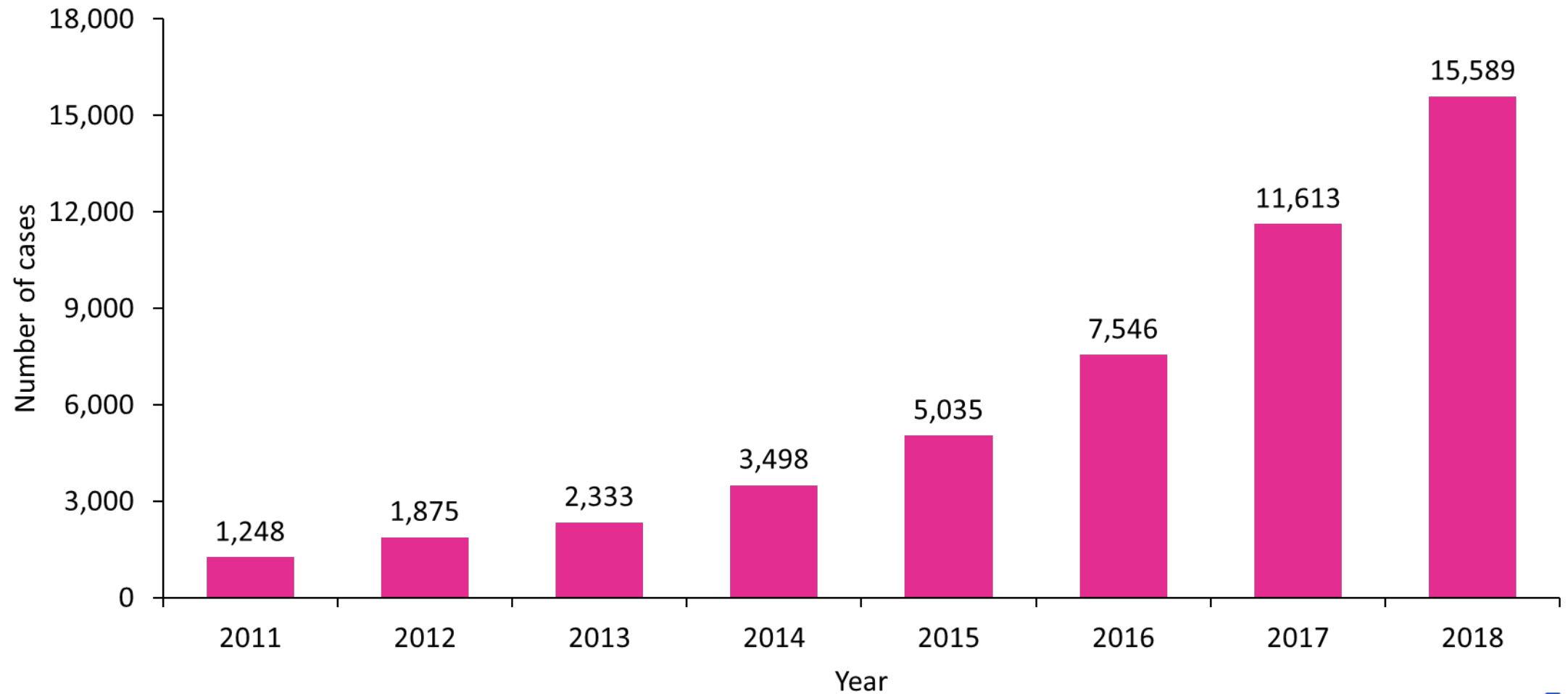


# Rectal chlamydia and gonorrhea

---

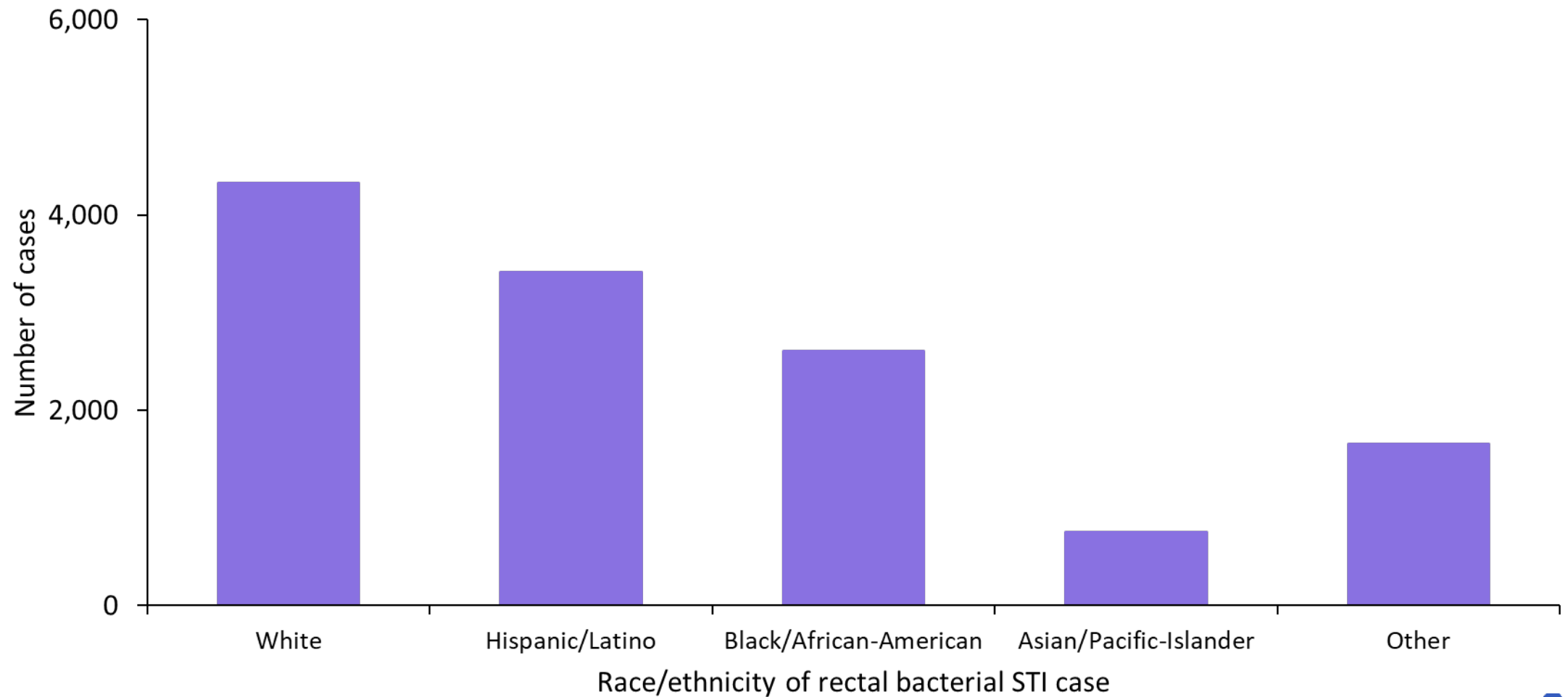


# Reported male rectal bacterial STI cases (gonorrhea, chlamydia), New York City, 2011-2018





# Reported male rectal bacterial STI cases (gonorrhea, chlamydia), by race/ethnicity, New York City, 2018



# Technical notes

---

# Methods

- **Reportable Disease Surveillance:** The Health Department receives reports from providers and laboratories for a number of infectious diseases, including sexually transmitted infections (STIs), as required by law in the [NYC Health Code](#). Basic demographic information for the person being tested is reported to the Health Department, including name, address, and date of birth.
- **Case reporting:** These data include people who live in NYC.
- **Rates per 100,000 population:** Rates were calculated using interpolated intercensal population estimates updated in 2018 by the Health Department using estimates from U.S. Census Bureau and NYC Department of City Planning. These rates differ from previously reported rates based on the 2000 Census or previous versions of population estimates.



# Notes on variables of interest

Variable	Definition
Reported Sex	Represents the sex reported for a person with an STI with the following options: male, female, and transgender. This variable is completed primarily based on provider- and laboratory-reports received by the Health Department, with additional information collected from case investigation or partner services interviews for specific infections (e.g., syphilis)
Race / Ethnicity	<p>Race and ethnicity information is often missing in reportable disease surveillance. Information for race/ethnicity comes from provider or laboratory reports, and, for people with specific infections (e.g., syphilis), from interviews conducted as part of case investigation or partner services.</p> <p>Differences in health outcomes between racial and ethnic groups can be explained by long-term structural racism, not biological or personal traits. Structural racism — centuries of racist policies and discriminatory practices across institutions, including government agencies, and society — prevents communities of color from accessing vital resources (such as health care, housing and food) and opportunities (such as employment and education), and negatively affects overall health and well-being.</p>
HIV Status	Determined by: a match against the NYC HIV/AIDS Reporting System (HARS) registry, and from HIV test information gleaned during the course of case investigations

# Select resources to aid in interpretation of STI trends in NYC

- Pathela P, Braunstein SL, Blank S, Schillinger JA. HIV incidence among men with and without sexually transmitted bacterial rectal infections: estimates from matching against an HIV case registry. *Clin Inf Dis* 2013;57(8):1203–1209
- Pathela P, Slutsker JS, Schillinger JA. Opportunities for HIV prevention: screening for rectal chlamydia and gonorrhea among men who have sex with men in New York City. *NYC Vital Signs* 2018;17(3); 1-4.
- Schillinger JA, Slutsker JS, Pathela P, Klingler EJ, Hennessy RR, Toro B, Blank S. The epidemiology of syphilis in New York City: historic trends and the current outbreak among men who have sex with men, 2016. *STD* 2018; 45:S48-54.
- Slutsker JS, Hennessy RR, Schillinger JA. Factors contributing to congenital syphilis cases — New York City, 2010–2016. *MMWR Morb Mortal Wkly Rep* 2018;67:1088–1093